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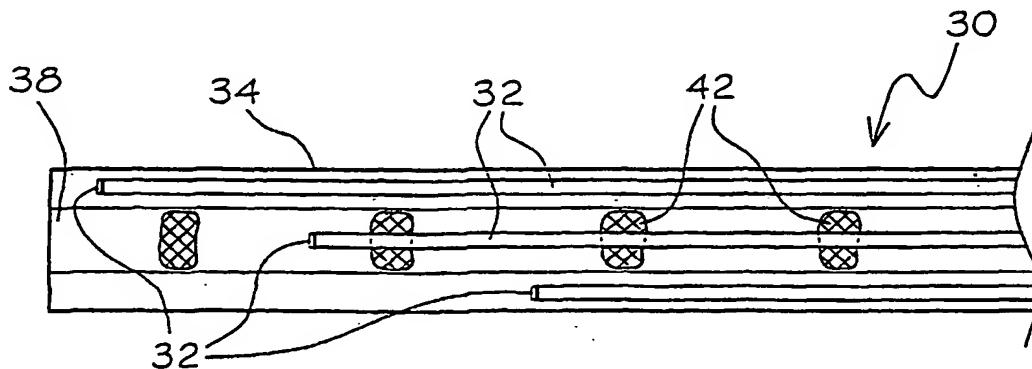
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(54) Title: ULTRASONIC PROBING DEVICE WITH DISTRIBUTED SENSING ELEMENTS



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(57) Abstract: A probing device (30) for insertion into a duct to determine local parameters associated with the physical structure the duct at a selected region of the duct, and in particular variations in the physical structure along a predetermined length of interest. The probing device (30) comprises: at least one of a plurality of waveguides (32) incorporated in an elongated assembly designed to be inserted into the duct; at least one of a plurality of transmitters, spaced and distributed along a predetermined length (42) of said at one of a plurality of waveguides (32) incorporated in the elongated assembly, each capable of independently transmitting an acoustic signal; a plurality of receivers, spaced and distributed along a predetermined length of said at least one of plurality of waveguides (32), each capable of receiving echoes of the acoustic signal.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00172

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 8/00
US CL : 600/437

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 600/407-478; 128/916; 604/22; 606/15, 130, 139

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,231,567 B1 (RIZOIU et al.) 15 May 2001 (15.05.2001) entire document.	1-60
A	US 6,527,763 B2 (ESCH et al.) 04 March 2003 (04.03.2003), entire document.	1-60

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See patent family annex.

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Continuation of B. FIELDS SEARCHED Item 3:
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search terms: acoustic, waveguide receiver, transmitter,